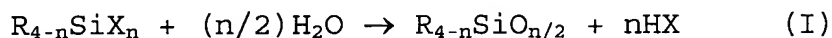
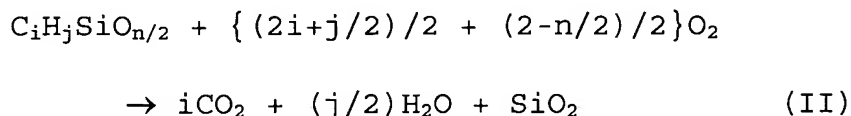


AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for preparing particulate silica, comprising the step of feeding a gas mixture of at least one organohalosilane gas of the formula: $R_{4-n}SiX_n$ wherein R is hydrogen, methyl, ethyl or phenyl, X is a halogen atom, n is an integer of 1 to 3, with the proviso that $n = 3$ when R is phenyl, a flammable gas capable of generating water vapor when burned, and a free oxygen-containing gas to a reaction chamber through a burner, whereby the organohalosilane is subjected to flame hydrolysis according to the scheme (I):



wherein R, X and n are as defined above, and then to oxidation reaction according to the scheme (II):



wherein C_iH_j is a general form of R_{4-n} so that i varies in the range of 0 to 6 and j varies in the range of 1 to 15 as R is hydrogen, methyl, ethyl or phenyl, n is as defined above, with the proviso

that $n = 3$ when R is phenyl, thereby forming particulate silica having a specific surface area of 205 to 400 m²/g and a logarithmic standard deviation of primary particle diameter of up to 0.45, wherein

the amount of said flammable gas fed is 1/2 to 3 mol per mol of said organohalosilane and such that the amount of water vapor resulting from combustion of said flammable gas is 1 to ~~6-times~~ 2 times the stoichiometric amount in scheme (I),

said burner has a plurality of concentric tubes including a center tube, having an outlet open to the reaction chamber,

said gas mixture is fed to the center tube of said burner such that it may have a linear velocity at the outlet of the center tube of 50 to 120 m/sec, calculated in the standard state, and

said flammable gas or said free oxygen-containing gas is fed to each outer tube arranged concentrically around the center tube of the burner.

2. (Original) The method of claim 1 wherein the amount calculated as oxygen of said free oxygen-containing gas fed is 1.0 to 2.0 times the sum of the oxygen equivalent necessary to synthesize SiO₂ from C_iH_jSiO_{n/2} in scheme (II) and the oxygen

equivalent necessary for theoretical combustion of said flammable gas.

3. (Original) The method of claim 1 wherein said organohalosilane is methyltrichlorosilane which is a by-product in the synthesis of dimethyldichlorosilane from metallic silicon and methyl chloride.

4. (Original) The method of claim 1 wherein said flammable gas is hydrogen.

5. (Original) The method of claim 1 wherein said free oxygen-containing gas is air.

6. (Original) The method of claim 1 wherein said burner is a quadruple-tube burner having center, second, third and fourth tubes arranged concentrically from inside to outside,

a mixture of the organohalosilane gas, the flammable gas and the free oxygen-containing gas is fed to the center tube,

the free oxygen-containing gas is fed to the second tube,

the flammable gas is fed to the third tube, and

the free oxygen-containing gas is fed to the fourth tube.

7. (Original) The method of claim 1 wherein said burner is a triple-tube burner having center, second and third tubes arranged concentrically from inside to outside,

a mixture of the organohalosilane gas, the flammable gas and the free oxygen-containing gas is fed to the center tube,

the free oxygen-containing gas is fed to the second tube, and the flammable gas is fed to the third tube.

8. (Original) The method of claim 1 wherein said burner is a double-tube burner having a center tube and a second tube surrounding the center tube,

a mixture of the organohalosilane gas, the flammable gas and the free oxygen-containing gas is fed to the center tube, and

the free oxygen-containing gas is fed to the second tube.

9. (Original) The method of claim 6 wherein the gas linear velocity at the outlet of the second tube is 10 to 80% of the gas linear velocity at the outlet of the center tube.

10. (Cancelled)

11. (Previously Presented) Particulate silica produced by the method of claim 1 and having a specific surface area of 215 to 400 m²/g and a logarithmic standard deviation of primary particle diameter of up to 0.5.

12. (Previously Presented) Particulate silica produced by the method of claim 1 and having a specific surface area of 305 to 400 m²/g and a logarithmic standard deviation of primary particle diameter of up to 0.5.